# Certified, modular Power Supplies for Fire Protection Systems

**ZSPM** 

Power Supplies for Fire Protection and Automation Systems

The modular ZSPM power supplies operate with external batteries and are a source of uninterruptible 24V voltage for the devices of:

- fire detection and fire alarm systems according to EN 54-4 + AC + A1 + A2
- heat and smoke control systems according to EN 12101-10 + AC
- fire protection systems according to Ordinance of the Polish Minister of the Internal Affairs and Administration of 20 June 2007 (Journal of Laws No. 143, pos. 1002, as amended of 27 April 2010 Journal od Laws No. 85, pos. 553)

Power supply holds the Certificate of constancy of parameters according to CNBOP-PIB No. 1438-CPR-0486

Declaration of performance No. DWU-MX-10

# MAIN FEATURES

CNBOP-PIB

- modular design
- high efficiency under load
- two or five outputs, protected separately with fuses
- possibility to connect a module with additional outputs
- bulk charging with current limitation suitable for battery capacity
- temperature compensation of floating operation voltage and bulk charging
- LVDD
- battery circuit resistance measurement
- immunity against short circuit of battery input

- immunity to reverse battery polarity connection
- two relay indication outputs each with a set of 3 contacts
- possibility to connect external LED indication (two LEDs)
- internal, diagnostic LED indication
- external alarm input

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- input for tamper indication for the cabinet in which ZSPM power supply is installed
- low quiescent current
- immunity to harsh working conditions

## EQUIPMENT

- metal mounting base
- temperature probe connected permanently
- remote indication: mains fault and general fault (NO and NC relay contacts available)
- fuse-protected output and battery circuits
- internal LVD
- 2-state external alarm input

## COMPLIANCE WITH SAFETY REQUIREMENTS, DIRECTIVES, EU REGULATIONS

- 2014/35/EU
- [LVD] Low voltage electrical devices.
- 2014/30/EU [EMC] EMC Compatibility.
- 305/2011/EU [CPR] Harmonized conditions for marketing of construction products.
- 2011/65/EU [RoHS 2] Requirements on limitation of use of certain hazardous substances in electrical and electronic equipment, with the amendment introduced by Directive 2015/863 (RoHS 3)





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## **BASIC PARAMETERS**

# Common Parameters

Nominal mains voltage	110 / 230V +10% -15%	
Nominal output voltage (in the temperature of 25°C)	27,1V	
Output voltage range	21,028,8V <sup>*1)</sup>	
Quiescent current consumption from a battery	12 / 17 / 25mA * <sup>2)</sup>	
Efficiency at nominal load and battery charged	89%	
Max. resistance of the battery circuit	100 / 150 / 250mΩ <sup>*2)</sup>	
Number of supervised batteries	2 x 12V	
Number of outputs protected with separate fuses	2 or 5 <sup>*2)</sup>	
Working temperature	-5+55°C	
Functional / Environmental class of EN 12101-10 + AC A / 2		
Protection class of EN 60950-1 + A11 + A1 + A12 + A2		

<sup>\*1)</sup> The range includes voltage between the discharged battery voltage (at the end of the battery operation

cycle) and the bulk charging voltage.

<sup>\*2)</sup> Depending on the type of power supply

### Individual parameters

Index	Charging current	Maximum output current Imax b	Nominal output current Imax a	Supported batteries	Dimensions (W x L x H) [mm]
ZSPM-75-05	0.5 A	2.5 A	2.1 A	79 Ah	122 x 178 x 38
ZSPM-75-10	1.0 A	2.5 A	1.6 A	720 Ah	122 x 178 x 38
ZSPM-150-05	0.5 A	5.5 A	5.1 A	79 Ah	122 x 225 x 38
ZSPM-150-10	1.0 A	5.5 A	4.6 A	720 Ah	122 x 225 x 38
ZSPM-150-20	2.0 A	5.5 A	3.5 A	945 Ah	122 x 225 x 38
ZSPM-200-18	1.8 A	7.5 A	5.8 A	740 Ah	140 x 318 x 38
ZSPM-200-33	3.3 A	7.5 A	4.3 A	1775 Ah	140 x 318 x 38
ZSPM-320-18	1.8 A	12 A	10.3 A	740 Ah	140 x 318 x 38
ZSPM-320-33	3.3 A	12 A	8.8 A	1775 Ah	140 x 318 x 38

### SUGGESTED ADDITIONAL ACCESSORIES

 output expansion module ZSP100-OUT6 or ZSP101-OUT6 including six additional, fuse protected outputs. Each of them has the LED indication of a blown fuse. The module transmits information on faults to the main power supply.



- set for sensing switch "tamper" A ZSP TM-1, A ZSP TM-2, (1switch and harness for ZSP powers supplies, 2- set without harness)
- harness for LED indication A ZSP DS-1 (yellow and green LED with plug to connect to powers supply connector, 1- with harness for ZSP powers supplies, 2- set without harness)

### Exemplary order

Power supply for fire protection signaling and automation ZSPM-75-10 1 pc. Battery 12V/18Ah 2 pcs. Set A ZSP TM-2 1 pc. Harness A ZSP DS-1 1 pc.

### MANUFACTURER

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